Anguidae, A New Family of Lizard for Thailand

Until recently, 6 saurian families were known to occur in Thai territory, i.e., Agamidae (chisel-teeth lizards), Gekkonidae (geckos), Lacertidae (wall and sand lizards), Scincidae (skinks), Dibamidae (blind lizards), and Varanidae (monitor lizards). Owing to the inadequacy of intensive surveys and studies of reptiles in Thailand, new additions to our faunal list can be expected.

During my field survey of wild animals conducted at Phu Luang Wildlife Sanctuary, Loei Province, in October 1984, I found a specimen of a hitherto unrecorded limbless lizard preserved in alcohol together with many other native snakes. The presence of eyelids and ear openings immediately distinguishes it from the true snakes. It was collected at Kok Nok-kaba, about 1,500 m altitude in April of that year while sunning itself in early morning. That specimen measures 350 mm in snout-vent length and 115 mm tail length; all measurements are done along the back, because it is in a curved posture with detached tail (Figs. 1 and 2). It is now deposited in the collection of the Ecological Research Department, Thailand Institute of Scientific and Technological Research. It is locally known by the vernacular name of 'Ngu Pao', which is collectively applied to the snakes of the genus *Oligodon*, which it closely resembles.

It agrees well with the description of the Burmese glass snake, Ophisaurus gracilis (Gray, 1845) in SMITH (1935). This anguid lizard is distributed widely from northeastern India through Burma to southwestern China and northern Laos, and in the eastern areas it overlaps with another anguid lizard, Hart's glass snake (O. harti). Its other relatives in Southeast Asia are the Bornean glass snake (O. buettikoferi) and Wegner's glass snake (O. wegneri), which are insular species.

The genus *Ophisaurus* Daudin, 1803, with 11 included species, consists of limbless terrestrial lizards, in the family Anguidae, commonly called lateral fold lizards. Its fossils have been recorded from the Lower Miocene of Germany and its present distribution includes North America, southeastern Europe, northern Africa, southwest to central and southern Asia, Formosa, and Borneo. It is diurnal in feeding habits and its diet consists of insects, molluses and small vertebrates. On finding in a stomach two fragments of an unusually large rat bone and no other parts of skeleton, the Bornean glass snake is suspected to also take carrion (INGER, 1958). It has secretive and possibly burrowing habits, which might explain its rarity in collections.

In a brief natural history, DANIEL (1983) reports that this glass snake is common at between 1,000 to 1,800 m altitude in the hills of eastern India and Upper Burma, living under logs and stones under which females lay and guard clutches of 4-5 eggs in September. An adult is light to dark brown above with a darker lateral band and transverse series of blue, dark-edged spots on back. A hatchling is 114 mm in length including a 70-mm tail, and pinkish buff with a metallic sheen colour. It hibernates during the cold weather. The tail is easily broken off as typical of geckos and has the same function of distracting predators.

Recently, on 20th April 1987 I obtained a second specimen, a hatchling (see Fig. 4), on Doi Pha Hom Pok (20.05°N + 99.10°E), Amphoe Mae Ei, Chiang Mai Province, at about 1,650 m in altitude on a ridge, on the opposite side of the country from the first site (Fig. 3). It was found hiding under a heap of oak litter with only its head protruding. This hatchling is 60 mm in snout-vent length and 117 mm in tail length; light brown above with 3 rows of brown dots longitudinally arranged on the back; a distinct dark brown lateral band is present on the side extending from eye to tail tip, and a second paler brown line parallels it below the lateral fold; the underparts are translucent so that the viscera are clearly visible. According to local inhabitants who are familiar with this limbless lizard, it is occasionally seen wriggling across forest trails and roads at dusk or on overcast days. especially after heavy rains.

These two records of this little-known lizard extend the known range into Thai territory, where it was formerly believed to occur. So the presence of the seventh family of lizard can be regarded as an expected addition to our vertebrate list; more materials and studies are greatly needed on this secretive lizard.

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Figure 1. A Burmese Glass Lizard (Ophisaurus gracilis)



Figure 2. A lizard showing a detached tail.



Figure 3. Map of Thailand showing a first collecting site (a) at Phu Luang Wildlife Sanctuary in Loei Province, and the second site (b) on Doi Pha Hom Pok in Chiang Mai Province.



Figure 4. Juvenile Ophisaurus gracilis from Doi Pha Hom Pok showing living colouration.